

Amendments to the Claims

Listing of Claims:

Original Claims 1 –7 (canceled).

Claim 8 (new): A protective circuit for protecting a CAN bus transceiver against overvoltage, wherein the CAN bus transceiver is configured, in voltage terms, for a first vehicle electrical system, and the CAN bus transceiver is operated in a second vehicle electrical system having a voltage multiple times a voltage of the first vehicle electrical system either alone or in a two-voltage vehicle electrical system with the first vehicle electrical system and the second vehicle electrical system, the CAN bus transceiver having two bus terminals for connection to respective bus lines and a supply voltage source of the transceiver with a positive terminal and a negative terminal, the protective circuit comprising:

two diodes connected between the bus terminals of the transceiver, said diodes having cathodes connected to one another and to a predefined potential;

a limiting resistor connected between each bus terminal of the transceiver and the bus line assigned thereto; and

a first current-mirror circuit connected between the positive terminal of said supply voltage source of the transceiver and the first bus line, and a second current-mirror circuit connected between the second bus line and ground, for restoring voltage levels reduced by said limiting resistors on the bus lines.

Claim 9 (new): The protective circuit according to claim 8, wherein a value of the predefined potential is within a range between the supply voltage of the transceiver and the vehicle electrical system voltage for which the transceiver is configured.

Claim 10 (new): The protective circuit according to claim 8, wherein the predefined potential corresponds to a breakdown voltage of a Zener diode having

a value within a range between the supply voltage of the transceiver and the vehicle electrical system voltage for which the transceiver is configured.

Claim 11 (new): The protective circuit according to claim 8, which comprises, for generating a reference current for said first current-mirror circuit and said second current-mirror circuit, a resistor and a third transistor inserted between transistors of said first and second current-mirror circuits, wherein said transistors are connected in series between the positive terminal of said supply voltage source and ground.

Claim 12 (new): The protective circuit according to claim 11, wherein said current-mirror circuits are selectively activated and deactivated via said third transistor by way of a control signal controlling a transmitting operation of the transceiver.

Claim 13 (new): The protective circuit according to claim 8, which comprises a series circuit including a Zener diode and two resistors connected between one bus line and ground, a further transistor having a base connected to a node between said resistors, an emitter connected to ground, and a collector connected to a base of said third transistor, wherein said two current-mirror circuits are deactivated when a voltage on one of the CAN bus lines exceeds a specific value determined by way of said series circuit of said Zener diode and said two resistors.

Claim 14 (new): In combination with a device having a plurality of CAN bus transceivers connected to a CAN bus, a plurality of protective circuits according to claim 8 each assigned and connected to a respective CAN bus transceiver for over-voltage protection.